

[Abstract]

[Object] An object of the present invention is to provide a vertical axis windmill in which a support frame is configured as a wind power dam, a vertical main shaft with blades in multiples stages is installed inside the support frame to collect wind powers into one, thereby to remarkably increase an area that can receive the wind per windmill installation area and to largely decrease the installation cost of the windmill by decreasing the same in size and weight.

[Means for Solution] In a vertical axis windmill 1, elongated blades 10 are arranged in multiple stages and mounted on one vertical main shaft 5 disposed inside a shaft-installation section 4a of a support frame 4, with the left-side surface of each of the blades being opposed to the vertical main shaft 5, each of the blades 10 is formed with tilted parts 10a extending toward the left side on an upper and lower ends of the same, a phase on a plane of each of the blades 10 is shifted by an equal angle in the rotational direction from that of a blade in an immediate upper stage thereof so that the blades 10 are equally spaced around the main shaft 5 as a whole on the plane.